

CLAIMS

1. A method of treating a physical vapor deposition target having a sputtering surface and a sidewall edge proximate a periphery of the sputtering surface, comprising:
 - 5 pressing a tool against the sidewall edge to form a distribution of imprints in the sidewall edge of the target; and
 - removing the tool from the sidewall edge.
2. The method of claim 1 wherein the distribution of imprints forms a repeating
10 pattern on the sidewall edge.
3. The method of claim 1 wherein the imprints are in the form of approximately diamond shapes.
- 15 4. The method of claim 1 wherein the physical vapor deposition target comprises a metallic material.
5. The method of claim 1 wherein the physical vapor deposition target comprises titanium.
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6. The method of claim 1 wherein the physical vapor deposition target comprises a ceramic material.
7. The method of claim 1 wherein the sidewall edge joins the sputtering surface at
25 a corner, and further comprising facetting the corner before the pressing.
8. The method of claim 1 wherein the sidewall edge joins the sputtering surface at a corner, and further comprising facetting the corner after the pressing.

9. The method of claim 1 wherein the physical vapor deposition target periphery is circular, wherein the sidewall edge surrounds the circular periphery and further comprising displacing the tool relative to the target to move the tool around the circular target periphery during the pressing.

10. The method of claim 9 further comprising providing a liquid lubricant between the tool and the target periphery during the pressing.

11. The method of claim 1 further comprising joining the target to a backing plate, and wherein the joining occurs before pressing the tool against the sidewall edge.

12. The method of claim 11 wherein the backing plate has a sidewall edge coextensive with the sidewall edge of the physical vapor deposition target, and wherein the tool is not pressed against said sidewall edge of the backing plate.

13. The method of claim 11 wherein the backing plate has a sidewall edge coextensive with the sidewall edge of the physical vapor deposition target, and wherein the tool is pressed against said sidewall edge of the backing plate to form imprints in the sidewall edge of the backing plate while forming the imprints in the sidewall edge of the target.

14. A physical vapor deposition target comprising:
a sputtering surface having an outer periphery; and
a sidewall edge along the outer periphery of the sputtering surface; the
sidewall edge having a repeating pattern of imprints extending therein.

15. The physical vapor deposition target of claim 14 comprising a metallic material.

16. The physical vapor deposition target of claim 14 comprising titanium.

17. The physical vapor deposition target of claim 14 comprising a ceramic material.

18. The physical vapor deposition target of claim 14 being joined to a backing plate; wherein the backing plate has a sidewall coextensive with the sidewall of the physical vapor deposition target; and wherein imprints are not in the backing plate sidewall.

19. The physical vapor deposition target of claim 14 being joined to a backing plate; wherein the backing plate has a sidewall coextensive with the sidewall of the physical vapor deposition target; and wherein imprints are in the backing plate sidewall.

20. The physical vapor deposition target of claim 14 wherein the outer periphery is circular, wherein the sidewall extends entirely around the circular outer periphery, and wherein the repeating pattern extends entirely around the circular outer periphery.

21. The physical vapor deposition target of claim 14 wherein the sidewall joins the sputtering surface through a faceted corner.

22. The physical vapor deposition target of claim 14 wherein the faceted corner comprises a facet region extending between the sidewall and the sputtering surface, and wherein imprints are not extending into said facet region.

23. The physical vapor deposition target of claim 14 wherein the imprints are in the form of approximately diamond shapes.